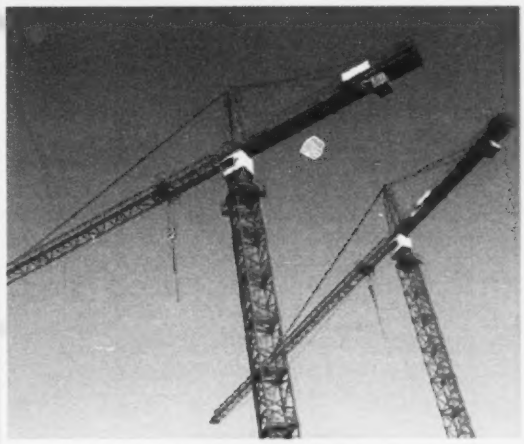

OCCUPATIONAL INJURIES AND DISEASES IN ALBERTA

Lost-Time Claims, Disabling Injury Claims and Claim Rates

Alberta Construction Safety Association Industries 2005 to 2009

WORK SAFE ALBERTA

Government of Alberta

Summer 2010

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HIGHLIGHTS

Lower lost-time claim and disabling injury rates in 2009.

- The 2009 lost-time claim rate for the Alberta Construction Safety Association (ACSA) industries decreased by 8.7%, to 1.84 per 100 person-years worked. The average lost-time claim rate for all sectors in the province was 1.69 per 100 person-years worked. The duration rate was 62 days lost per 100 person-years worked, a 3.5% decrease from 2008, but 22 days higher than the average for all sectors of the province, 40.
- The disabling injury rate decreased by 15.6% in 2009, to 4.13 per 100 person-years worked. The average disabling injury rate for all sectors in the province was 3.09 per 100 person-years worked.
- Lost-time claims decreased by 21.0% and disabling injury claims decreased by 27.0%. The person-years worked estimates decreased by 13.5%.
- The 2009 fatality rate was 146 per million person-years worked. The average fatality rate for all sectors in the province in 2009 was 71 per million person-years worked.

Largest employers experienced the lowest lost-time claim rates.

- Employers with less than 10 person-years worked had the highest lost-time claim rates at 2.52 per 100 person-years worked. Employers with 100 or more person-years worked had the lowest, 0.98.
- For disabling injury rates, employers with 40 to 99 person-years worked displayed the highest rate at 4.60 per 100 person-years worked and employers with less than 10 person-years worked the lowest rate, 3.06.

Injury rates decreased in all sub-sectors.

- Lost-time claim and disabling injury rates decreased in all ACSA industries.
- All the ACSA sub-sectors experienced steady decreases in lost-time claim rates and disabling injury rates since 2006. The Industrial Construction sub-sector experienced the largest decrease in its lost-time claim rate since 2005, 47.6%.
- The Industrial Construction sub-sector had the lowest lost-time claim rate at 1.32 per 100 person-years worked and the Roadbuilders sub-sector the lowest disabling injury rate at 3.42 per 100 person-years worked.
- The ACSA industries accounted for 16.0% of the person-years worked in the province, 17.4% of the lost-time claims, 22.6% of modified work claims and 21.5% of the disabling injury claims.

In 2009, sprains, strains and tears was the most common nature of injury.

- Sprains, strains and tears continued to be the leading nature of injury, accounting for 47.8% of the disabling injury claims submitted in the ACSA industries. However, the ACSA industries had higher proportions for disabling injury claims for fractures and dislocations, indicating a likelihood 1.4 times higher than the average for all sectors.
- The trunk was the most commonly injured body part, accounting for over 35.9% of the total lost-time claims and 34.2% of disabling injury claims. Disabling injury claims connected with the eye(s) however, displayed a proportion of occurring that was 1.9 times higher than the average for all sectors. Injuries to leg(s), and ankle(s) and foot (feet) displayed proportions that were 1.6 and 1.5 times higher than the average.
- The primary sources of injury causing disabling injury claims were parts and materials, accounting for 21.2% of the claims. Compared to the average for all sectors in the province, the source of injury category minerals - metallic or nonmetallic products displayed a proportion 3.3 times higher than the average for all sectors. Hand tools – powered displayed a proportion that was 3.0 times higher than the average for all sectors.
- In 2009, the two most common types of event or exposure, bodily reaction and exertion, and contact with objects and equipment, accounted for 74.0% of disabling injury claims in the ACSA industries. Disabling injury claims caused by falls to the lower level however, had a proportion that was 2.2 times the average for all sectors of the province. Being rubbed and abraded had a proportion 2.1 times higher.
- The median work days lost was 11, compared to the provincial figure of seven. The average days lost per claim was 33, compared to the average for all sectors in the province, 24 days lost per claim.

A few notes about this report:

- This report presents 2009 data beside 2008 data to help with comparisons. Additional historical data are presented where possible.
- Information presented in this report is based on incidents that occurred during 2009 and were accepted as lost-time or modified work claims by Workers' Compensation Board (WCB) as of March 31, 2010.
- Injury claim rates based on a small number of person-years worked are too volatile to make valid comparisons over time. Therefore, claim rates are not calculated when there are fewer than 40 person-years worked. Duration rates are also volatile when based on a small number of lost-time claims. Duration rates are not calculated when there are fewer than 30 lost-time claims.
- Estimates of year-over-year change for rates presented in this report are calculated using unrounded figures and may not match those produced from rounded figures. Percentages displayed in tables may also not total 100, due to rounding.
- Throughout the report, the lost-time claim rate is the number of lost-time claims per 100 person-years worked, the disabling injury rate is the number of disabling injury claims per 100 person-years worked and the duration rate is the number of days lost per 100 person-years worked. Fatality rates are expressed as the number of fatalities per million person-years worked.
- Analyses by industry are based on WCB industry classification and aggregation. For more information see http://ds.wcb.ab.ca/WCB.RateManual.WebServer/alphaindex.aspx.
- Analyses by occupation group are based on the National Occupational Classification (NOC). The NOC provides a standard list of occupations across the country. For more information see http://www5.hrsdc.gc.ca/NOC.
- Occupational injuries and diseases listed throughout this report are based on the Z795 Coding of Work Injury or Disease Information produced by the Canadian Standards Association (CSA) for categorizing occupational injury and disease. For information see http://www.shopcsa.ca/onlinestore/GetCatalogItemDetails.asp?mat=2416404.
- Terms, definitions and formulas used throughout this report are described in Appendix A.

INTRODUCTION

Role of the Ministry of Employment and Immigration

The Ministry of Employment and Immigration includes the reporting entity of the Department of Employment and Immigration (E&I). E&I develops and delivers policies, programs and services to foster labour force development; ensure fair, safe and healthy workplaces; and help those in need. The Department also provides leadership for immigration and interprovincial labour mobility policy for the Government of Alberta, and coordinates resources to support the settlement and integration of new Albertans.

Occupational Injuries and Diseases in Alberta – Alberta Construction Safety Association Industries 2005 to 2009

The Department of Employment and Immigration (E&I) prepares this annual report to provide analysis of workplace health and safety to meet the demand from industry and safety associations, labour organizations, employers and workers for incorporating this information into their strategic plans for enhancing workplace health and safety. This includes:

- descriptions of programs and initiatives undertaken in pursuit of its workplace health and safety mission and goals;
- analysis of provincial occupational injury and disease information;
- estimations of the risk of injury or disease at the provincial, industry sector and sub-sector level as well as general descriptions about the incidents and injured workers.

The *Occupational Injuries and Diseases in Alberta* publications present analysis of aggregate injury claim data to allow for the tracking of workplace health and safety performance over time. This is important for evaluating past and present performance, and in providing strategic information for the direction of workplace health and safety policy. The analysis contained in this report provides a comprehensive picture of workplace injuries in the province, allowing for a prevention focus to be made based on injury probabilities, rather than possibilities.

Healthy and Productive Workplaces

E&I promotes safe, healthy and productive workplaces, as well as fair, equitable and stable labour relations to ensure a fair, safe and healthy work environment for Alberta's workers. Work is central to people's lives, to the stability of families and societies. People want work that provides them with an acceptable standard of living. It is important that workers enter an environment where their health and safety is protected, where they are treated with respect and they are compensated fairly for the job they are doing. This results in an attractive workplace that furthers the position of Alberta employers to be competitive in the

global economy (see Note 1.1). Alongside the human cost of occupational injuries and diseases and the impact on families and society, the economic costs are numerous.

Claim costs for occupational injury and disease by WCB are projected to total $700 million in 2010.[1] These costs are ultimately paid by employers through premium payments, and impact the costs of running a business as well as the final cost of delivering products and services. Further costs associated with occupational injuries and diseases include the material damage to equipment and premises, the additional cost of hiring staff to cover for injured workers, and the lost productivity resulting from the absence. Additional impacts of poor health and safety for employers include higher absenteeism and lower morale of employees, loss of skilled experienced employees, loss of the company's investment in training, and difficulty recruiting high-quality employees due to the loss of image (particularly in the case of subcontractors to larger companies) all leading to losses in productivity and underutilization of production (see Note 1.2).

Note 1.1
Research by the International Institute for Management Development and the World Economic Forum suggests that the safest-working countries also have the best competitiveness ratings
(ILO, XVIIth World Congress on Safety and Health at Work, Introductory Report: Decent Work-Safe Work, September 2005).

Other costs borne by the economy and society, due in part to work-related injuries and diseases include early retirements, unemployment and poorer households. The International Labour Organization (ILO) estimates that in high-income countries, around 40% of all retirements (before statutory age) are caused by disability. This is equivalent to around 14% of the lifetime working capacity of the employed labour force.[2] Occupational injuries and diseases also affect unemployment and household income levels. Workers with an impairment of capacity can reduce their re-employability and impact household income. Workplace injuries and diseases typically reduce the overall earnings of households and in certain cases, family members have to give up jobs in order to care for an injured worker.

Note 1.2
The International Labour Organization (ILO) estimates that approximately 4% of Gross Domestic Product is lost due to occupational injuries and diseases (*ILO, World Day for Safety and Health at Work 2009 – Facts on safety and health at work issues, April 2009*).

[1] See the Workers Compensation Board Alberta 2010 Premium Rate Manual
https://www.wcb.ab.ca/pdfs/employers/10_premium_rate_manual.pdf

[2] See the International Labour Organization report: Safety in numbers – pointers for a global safety culture at work
http://www.ilo.org/public/english/region/eurpro/budapest/download/safety_in_numbers_engl.pdf

PROVINCIAL SUMMARY

The positive trend continues: there were fewer injuries in 2009.

In recent years, improvements were made to the analysis of WCB claim information allowing for modified work claims to be analyzed alongside lost-time claims. Using modified work claim data in addition to lost-time claim data ensures a more comprehensive picture of workplace injuries, and allows for greater insight into incident prevention.

A lost-time claim is a claim submitted to the WCB for an occupational injury or disease that causes a worker to have time away from work beyond the day of injury. Included are claims receiving reimbursement of full or partial lost wages due to occupational illness or injury, or payment for permanent loss of function (for example, hearing loss).

Note 2.1
The lost-time claim rate represents the probability or risk of an injury or disease to a worker requiring time away from work, during a period of one year of work.
The disabling injury rate represents the probability or risk of a disabling injury.

A modified work claim is submitted for an occupational injury or disease where workers have their normal work duties altered enabling them to remain working without losing time from work. Included in the figures are claims where injured workers are helped back into the workplace with modified duties after time lost due to injury or disease, and cases where workers were provided modified duties prior to time lost because of an injury or disease.

Modifying an injured worker's duties can be beneficial for both an employer and an employee. For the employer, the financial cost of an absent worker can be high and returning an injured employee to work as soon as it is medically possible is important for properly managing compensation, disability claims and productivity levels. For the employee, returning to work as soon as medically possible is beneficial both physically and psychologically, and is linked to quicker recovery rates and promotion of self-esteem. Long absences from the workplace are also linked to decreases in labour market attachment.

The number of disabling injury claims combine both the lost-time and modified work concepts and produces an overall figure where an occupational injury or disease disables a worker causing either time-lost from work or for normal work duties to be modified.

In 2009, a total of 26,096 lost-time claims were accepted by WCB. This is a decrease of 16.9% from 2008. In contrast, the person-years worked estimates increased by 7.9% to 1,539,738 between 2008 and 2009 (see Table 2.1). Expressed as a lost-time claim rate, the data translates into a rate of 1.69 per 100 person-years worked, a decrease of 9.8% from 2008, as proportionately there were fewer lost-time injury claims. The 2009 rate is the

lowest in the past nineteen years and since 1991, the lost-time claim rate has decreased by 59.1%. Since 2005, the lost-time claim rate has decreased by 29.7%.

Table 2.1
Provincial Figures – Alberta: 2008 and 2009

	2008	2009	% Change
Person-years worked	1,671,916	**1,539,738**	-7.9%
Lost-time claims	31,410	**26,096**	-16.9%
Lost-time claim rate	1.88	**1.69**	**-9.8%**
Modified-work claims	51,725	**34,818**	-32.7%
Lost-time claims involving modified-work	22,443	**13,409**	-40.3%
Disabling injury claims	60,692	**47,505**	-21.7%
Disabling injury rate	3.63	**3.09**	**-15.0%**
Duration rate	41	**40**	-3.2%
Days lost (LTC)	689,523	**614,757**	-10.8%
Transaction claim costs (LTC)	$211,054,921	**$195,089,312**	-7.6%

Data Source: WCB Data, Prepared by Data Development and Evaluation

The total number of modified work claims submitted in 2009 was 34,818, a decrease of 32.7%. There were 13,409 claims involving both lost-time and modified work, decreased by 40.3% from 2008. The number of disabling injury claims was 47,505, a decrease of 21.7% from 2008. Expressed as a rate, the 2009 disabling injury rate was 3.09 per 100 person-years worked, a decrease of 15.0% from the 2008 rate of 3.63.

Estimates of injury and disease severity are calculated using information on the number of days lost from work. Three basic measures of severity are the duration rate, median days lost from work and average days lost from work. The efforts of employers to introduce modified work programs to integrate injured workers back into the workforce also have a positive impact on work days lost. The duration rate of 40 days lost per 100 person-years worked was 3.2% lower than in 2008. The median number of work days lost in 2009 was seven, the same as 2008, and the average days lost increased to 24, from 22 in 2008.

The 2009 lost-time claim rate for the ACSA industries of 1.84 per 100 person-years worked is lower than four of the eight major industry sectors. The disabling injury rate of 4.13 per 100 person-years worked is higher than all major industry sectors, except the Manufacturing, Processing and Packaging sector (see Table 2.2).

Table 2.2
Both Lost-Time Claim and Disabling Injury Rates by Major Industry Sector in Alberta were Lower in 2009 than 2008

Major Industry Sector	2008		2009	
	Lost-Time Claim Rate	Disabling Injury Rate	Lost-Time Claim Rate	Disabling Injury Rate
Alberta	1.88	3.63	**1.69**	**3.09**
Agriculture and Forestry	2.72	3.65	**2.36**	**3.02**
Business, Personal and Professional Services	1.20	1.79	**1.08**	**1.57**
Construction and Construction Trade Services	1.91	4.65	**1.73**	**3.92**
Manufacturing, Processing and Packaging	2.24	5.78	**1.65**	**4.42**
Mining and Petroleum Development	0.66	2.92	**0.53**	**2.03**
Public Administration, Education and Health Services	2.29	3.00	**2.21**	**2.90**
Transportation, Communication and Utilities	2.69	4.42	**2.44**	**3.98**
Wholesale and Retail	1.99	3.44	**1.85**	**3.17**
Alberta Construction Association Industries	2.02	4.89	**1.84**	**4.13**

Data Source: WCB Data, Prepared by Data Development and Evaluation

ACSA is a non-profit organization funded and directed by industry. The majority of industries included in the ACSA are from the Construction and Construction Trade Services sector[3]. ACSA industries also includes the Transit Mix Operations industry and the Welding industry, categorized in the Manufacturing, Processing and Packaging sector, as well as the Boring, Horizontal or Angular industry and the Machinery or Equipment–NEC, Sales/Service/Repair industry which are grouped in the Mining and Petroleum sector and the Wholesale and Retail sector.

[3] The Construction and Construction Trade Services sector is a main industry sector as classified by WCB. For more information see industry descriptions https://ds.wcb.ab.ca/WCB.RateManual.WebServer/SectorIndex.aspx

INDUSTRY SECTOR SUMMARY

The 2009 lost-time claim rate for the ACSA industries decreased by 8.7% and the disabling injury rate decreased by 15.6% from 2008.

In 2009, there were 4,546 lost-time claims in the ACSA industries, representing 17.4% of the total lost-time claims in the province. The lost-time claim rate for the ACSA industries was 1.84 per 100 person-years worked, a decrease of 8.7% from 2008. The average lost-time claim rate for all sectors of the province in 2008 was 1.69 per 100 person-years worked. The disabling injury rate for the ACSA industries decreased by 15.6% in 2009, to 4.13 per 100 person-years worked (see Table 3.1). The average disabling injury rate for all sectors of the province in 2009 was 3.09 per 100 person-years worked.

The decrease in lost-time claim and disabling injury rates for the ACSA industries was a result of decreases in the number of lost-time claims and the number disabling injury claims. The person-years worked estimates decreased in 2009 by 13.5% in the ACSA industries. The number of lost-time claims decreased by 21.0% and the number of disabling injury claims decreased by 27.0%.

Table 3.1
ACSA Industries — Alberta: 2008 - 2009

	2008	2009	% Change
Person-years worked	285,356	**246,834**	-13.5%
Lost-time claims	5,758	**4,546**	-21.0%
Lost-time claim rate	**2.02**	**1.84**	**-8.7%**
Modified-work claims	11,898	**7,886**	-33.7%
Lost-time claims involving modified work	3,691	**2,236**	-39.4%
Disabling injury claims	13,965	**10,196**	-27.0%
Disabling injury rate	**4.89**	**4.13**	**-15.6%**
Duration rate	64	**62**	-3.5%
Days lost (LTC)	182,379	**152,169**	-16.6%
Transaction claim costs (LTC)	$58,202,371	**$49,679,609**	-14.6%

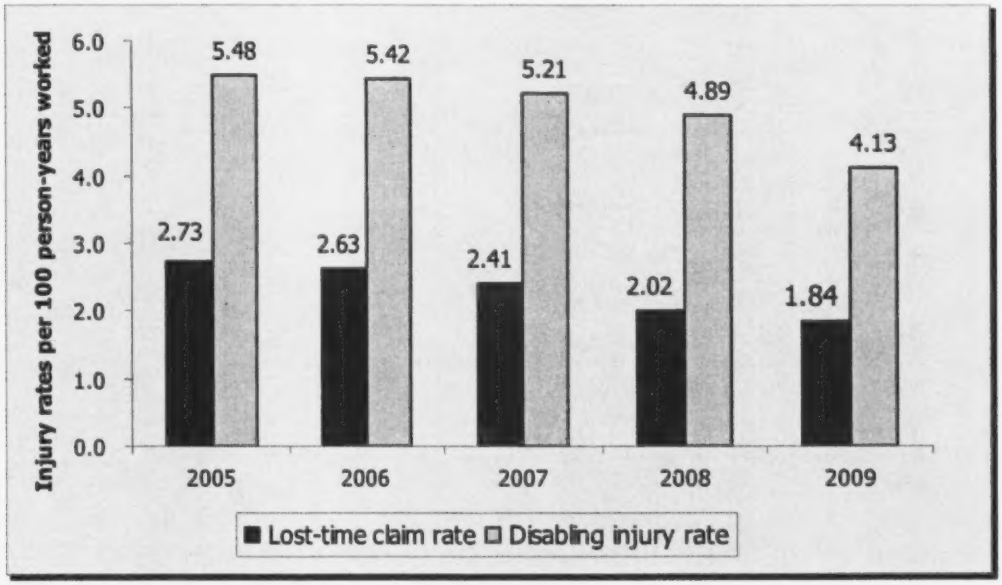
Data Source: WCB Data, Prepared by Data Development and Evaluation

The decrease in the person-years worked estimates in 2009 was a result of decreases in all sub-sectors. The largest sub-sector, Industrial Construction, accounting for 31.8% of the person-years worked, decreased by 12.1% from 2008. The next largest sub-sector, Roadbuilders, accounting for 19.5% of the person-years worked, displayed a decrease of 18.7% from 2008. The number of lost-time claims decreased by 24.6% in the Industrial Construction sub-sector. In the Roadbuilders sub-sector, lost-time claims decreased by 27.6%.

The duration rate indicates the severity of the effects of occupational injury and disease as reflected by the number of days off work per 100 person-years worked. In 2009, the ACSA industries had a duration rate of 62 days lost per 100 person-years worked, a 3.5% decrease from the 2008 rate of 64, but 22 days higher than the average for all sectors of the province, 40. The median work days lost was 11, while the average days lost per claims was 33. Provincially, the median days lost was seven and the average days lost was 24.

The average lost-time claim rate for all sectors of the province fell by 29.7% between 2005 and 2009. Over the same period, the lost-time claim rate for the ACSA industries fell by 32.6%. The decrease is the result of the number lost-time claims decreasing by 20.9% while the person-years worked estimates increased by 17.2%. This means that, despite an increase in the number of people working in ACSA industries, the number of lost-time claims has decreased.

Chart 3.1
Injury Rates for ACSA Industries — Alberta: 2005 - 2009



Data Source: WCB Data, Prepared by Data Development and Evaluation

Rates by Employer Size

In the ACSA industries, employers with less than 10 person-years worked had the highest lost-time claim rates at 2.52 per 100 person-years worked. Employers with 100 or more person-years worked had the lowest at 0.98 per 100 person-years worked. For all sectors of the province, employers with 40 to 99 person-years worked and employers with 20 to 39 person-years worked had the highest lost-time claim rates at 1.71 and 1.68 per 100 person-years worked respectively.

For disabling injury rates, employers with 40 to 99 person-years worked displayed the highest rate at 4.60 per 100 person-years worked and employers with less than 10 person-

years worked had the lowest, at 3.06 (see Table 3.2). For all sectors of the province, employers with 100 or more person-years worked had the highest disabling injury rate at 3.38 per 100 person-years worked.

A low lost-time claim rate and high disabling injury rate can be indicative of proficient claims management. However, it may also be a reflection of larger employers having greater capacity to offer modified duties to injured workers than smaller employers.

Table 3.2
Lost-Time Claim Rate by Size[4] of Employer — Alberta: 2009

Size of Employer	Number of Accounts	Person-Years Worked	Lost-Time Claims	Disabling Injury Claims	Lost-Time Claim Rate	Disabling Injury Rate
Less than 10 person-years	46,393	60,158	1,516	1,842	2.52	3.06
10 to 19 person-years	1,570	22,239	531	785	2.39	3.53
20 to 39 person-years	884	24,745	550	1,047	2.22	4.23
40 to 99 person-years	580	34,832	762	1,602	2.19	4.60
100 or more person-years	347	104,861	1,031	4,750	0.98	4.53
Unspecified*	62	N/A*	156	170	N/A*	N/A*

* These are employers with no payroll information or with person-years worked equal to zero.
Data Source: WCB Data, Prepared by Data Development and Evaluation

Distribution of Injury Claims

For the ACSA industries, 95% of employers had no lost-time claims and 93% of employers had no disabling injury claims, meaning the injuries and diseases happening in the ACSA industries are the result of incidents occurring at the operations of less than 10% of employers. This compares well to all sectors in the province where 94% of employers submitted no lost-time claims and 93% no disabling injury claims. In 2009, the number of employers with no lost-time claims and the number of employers with no disabling injury claims translates to 50% and 38% of the total person-years worked in the ACSA industries respectively (see Table 4.11). This indicates that employers with no lost-time claims and no disabling injury claims tend to be smaller in size compared with employers with submitted claims.

For employers with submitted claims, 73% submitted one lost-time claim, 23% submitted two to five claims and 3% submitted six or more lost-time claims. For employers with submitted disabling injury claims, 63% submitted one disabling injury claim, 28% submitted two to five claims and 9% submitted six or more disabling injury claims.

Employers that submitted one to five lost-time claims and employers that submitted one to five disabling injury claims accounted for 34% and 29% of the total person-years worked

[4] Size is measured in terms of person-years worked. One person-year is equivalent to one full-time worker working for one year.

in the ACSA industries respectively. Employers that submitted six or more lost-time and disabling injury claims accounted for approximately 16% and 33% of the total person-years worked in the ACSA industries.

INDUSTRY SECTOR ANALYSIS

All the ACSA sub-sectors experienced a steady decrease in lost-time claim rate and disabling injury rate since 2006.

Between 2006 and 2009, all the ACSA sub-sectors showed a steady decrease in both lost-time claim rate and disabling injury rate each year (see Table 4.1). The Industrial Construction sub-sector experienced the largest decrease in its lost-time claim rate since 2005, 47.6%. The Mechanical, Electrical and Insulation sub-sector experienced the smallest decrease since 2005, 21.2%.

Table 4.1
Lost-Time Claim Rate by ACSA Sub-Sector — Alberta: 2005 - 2009

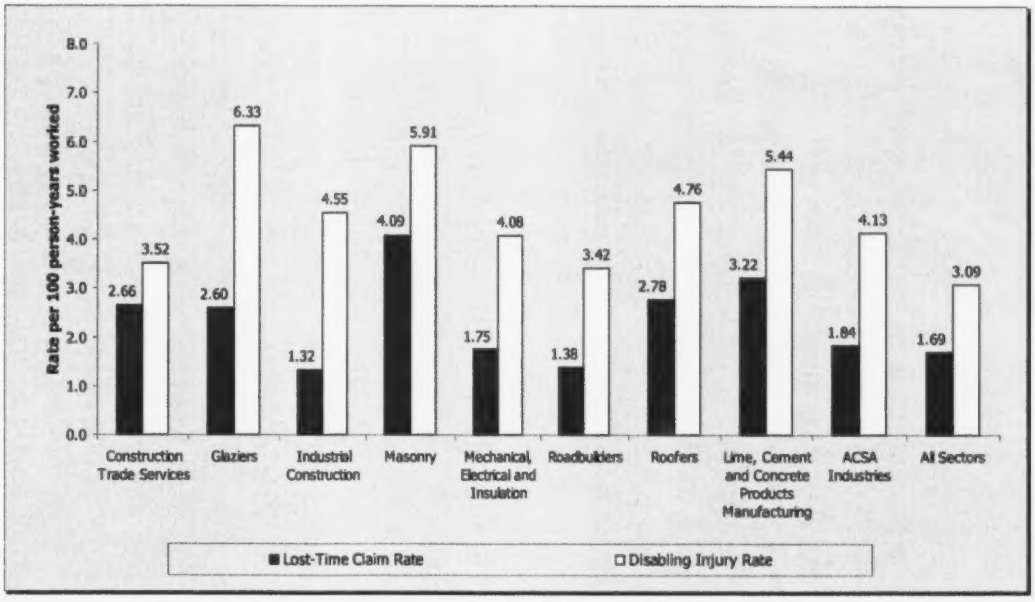
Sub-Sector	2005	2006	2007	2008	2009
ACSA	2.73	2.63	2.41	2.02	**1.84**
Construction Trade Services	3.40	3.60	3.24	2.78	**2.66**
Glaziers	3.52	3.53	3.43	3.13	**2.60**
Industrial Construction	2.52	2.12	1.75	1.54	**1.32**
Masonry	7.38	7.13	7.08	5.04	**4.09**
Mechanical, Electrical and Insulation	2.23	2.08	2.19	1.80	**1.75**
Roadbuilders	2.14	2.03	1.91	1.55	**1.38**
Roofers	3.89	4.70	3.78	3.32	**2.78**
Lime, Cement and Concrete Products Manufacturing	5.07	4.88	4.55	3.71	**3.22**

Data Source: WCB Data, Prepared by Data Development and Evaluation

The Industrial Construction sub-sector had the lowest lost-time claim rate at 1.32 per 100 person-years worked in 2009, and the Roadbuilders sub-sector the lowest disabling injury rate at 3.42 per 100 person-years worked. All sub-sectors displayed disabling injury rates that were higher than the average rate for all sectors of the province (see Chart 4.1).

In 2009, the Masonry sub-sector had the highest lost-time claim rate at 4.09 per 100 person-years worked. The Glaziers sub-sector had the highest disabling injury rate at 6.33 per 100 person-years worked.

Chart 4.1
Lost-Time Claim and Disabling Injury Claim Rate for the ACSA Industries — Alberta: 2009



Data Source: WCB Data, Prepared by Data Development and Evaluation

Construction Trade Services

In 2009, the Construction Trade Services sub-sector was the second largest of the ACSA industries, accounting for 20.6% of the person-years worked. The Construction Trade Services sub-sector had a lost-time claim rate of 2.66 per 100 person-years worked and a disabling injury rate of 3.52 per 100 person-years worked. Both rates decreased from 2008, by 4.5% and 4.3%. The duration rate was 96 days lost per 100 person-years worked, an increase of 2.7% from 2008 and higher than the average for all ACSA industries, 62 days lost per 100 person-years worked. This is indicative of longer recovery times from injury for workers in this sub-sector.

The lost-time claim rate for the Construction Trade Services sub-sector decreased in 2009 as a result of the number of lost-time claims decreasing at a higher rate than the person-years worked estimates, 13.9% compared to 9.8%. Disabling injury claims decreased by 13.7%.

Over the last five years, the lost-time claim rate for the Construction Trade Services sub-sector decreased by 21.8% compared to the average for all ACSA industries, 32.6%, and the average for all sectors in the province 29.7%.

Table 4.2
Construction Trade Services — Alberta: 2008-2009

	2008	2009	% Change
Person-years worked	56,401	**50,862**	-9.8%
Lost-time claims	1,569	**1,351**	-13.9%
Lost-time claim rate	**2.78**	**2.66**	**-4.5%**
Modified-work claims	1,373	**1,008**	-26.6%
Lost-time claims involving modified work	870	**571**	-34.4%
Disabling injury claims	2,072	**1,788**	-13.7%
Disabling injury rate	**3.67**	**3.52**	**-4.3%**
Duration rate	94	**96**	2.7%
Days lost (LTC)	52,836	**48,915**	-7.4%
Transaction claim costs (LTC)	$14,835,865	**$14,174,079**	-4.5%

Data Source: WCB Data, Prepared by Data Development and Evaluation

Glaziers

The lost-time claim rate in 2009 for the Glaziers sub-sector decreased by 17.0%, to 2.60 per 100 person-years worked. The disabling injury rate decreased by 28.0% to 6.33 per 100 person-years worked. The disabling injury rate was the highest of all sub-sectors in the ACSA industries. The duration rate was 56 days lost per 100 person-years worked, a decrease of 10.0% from 2008 (see Table 4.3) and the third lowest of all sub-sectors in the ACSA industries.

The Glaziers sub-sector experienced a decrease in both lost-time claim rate and disabling injury rate in 2009 of 17.0% and 28.0% respectively. This was the result of the number of injury claims decreasing by a greater amount than the person-years worked estimates. Lost-time claims decreased by 23.5% and disabling injury claims by 33.7%. The person-years worked estimates decreased by 7.9%, meaning that proportionately there were fewer injury claims.

Over the last five years, the lost-time claim rate for the Glaziers sub-sector decreased by 26.1%. The average decrease for all sectors of the province was 29.7%.

Table 4.3
Glaziers — Alberta: 2008-2009

	2008	2009	% Change
Person-years worked	9,236	**8,505**	-7.9%
Lost-time claims	289	**221**	-23.5%
Lost-time claim rate	**3.13**	**2.60**	**-17.0%**
Modified-work claims	748	**443**	-40.8%
Lost-time claims involving modified work	225	**126**	-44.0%
Disabling injury claims	812	**538**	-33.7%
Disabling injury rate	**8.79**	**6.33**	**-28.0%**
Duration rate	62	**56**	-10.0%
Days lost (LTC)	5,764	**4,776**	-17.1%
Transaction claim costs (LTC)	$1,817,683	**$1,476,199**	-18.8%

Data Source: WCB Data, Prepared by Data Development and Evaluation

Industrial Construction

The Industrial Construction sub-sector is the largest of the ACSA industries, accounting for 31.8% of the ACSA industries person-years worked. In 2009, the lost-time claim rate decreased by 14.2%, to 1.32 per 100 person-years worked as the number of lost-time claims decreased by 24.6% and the number of person-years worked decreased by 12.1%. The disabling injury rate decreased by 19.4%, to 4.55 per 100 person-years worked.

The lost-time claim rate was lower than the average lost-time for all ACSA industries, 1.84 per 100 person-years worked. The duration rate for this sub-sector decreased from 50 days lost per 100 person-years worked in 2008, to 44 in 2009 (see Table 4.4).

Between 2005 and 2009, the lost-time claim rate for the Industrial Construction sub-sector decreased by 47.6% compared to the average for all ACSA industries, 32.6%, and the average for all sectors in the province, 29.7%.

Table 4.4
Industrial Construction — Alberta: 2008-2009

	2008	2009	% Change
Person-years worked	89,423	**78,594**	-12.1%
Lost-time claims	1,377	**1,038**	-24.6%
Lost-time claim rate	**1.54**	**1.32**	**-14.2%**
Modified-work claims	4,653	**3,118**	-33.0%
Lost-time claims involving modified work	979	**578**	-41.0%
Disabling injury claims	5,051	**3,578**	-29.2%
Disabling injury rate	**5.65**	**4.55**	**-19.4%**
Duration rate	50	**44**	-11.4%
Days lost (LTC)	44,765	**34,854**	-22.1%
Transaction claim costs (LTC)	$15,182,605	**$12,347,490**	-18.7%

Data Source: WCB Data, Prepared by Data Development and Evaluation

Masonry

The Masonry industry experienced a decrease in the lost-time claim rate of 19.0%, to 4.09 per 100 person-years worked in 2009. Although this industry is small compared to other sub-sectors, it has the highest lost-time claim rate in the ACSA industries. There were also indications of a high severity of injury. The duration rate decrease by 27.0% to 114 days lost per 100 person-years worked in 2009 and was the second highest rate of the ACSA industries (see Table 4.5).

Over the last five years, the lost-time claim rate for the Masonry industry has decreased by 44.6% from 7.38 per 100 person-years worked in 2005 to 4.09 per 100 person-years worked in 2009.

Table 4.5
Masonry — Alberta: 2008-2009

	2008	2009	% Change
Person-years worked	1,804	**1,590**	-11.8%
Lost-time claims	91	**65**	-28.6%
Lost-time claim rate	**5.04**	**4.09**	**-19.0%**
Modified-work claims	79	**51**	-35.4%
Lost-time claims involving modified work	50	**22**	-56.0%
Disabling injury claims	120	**94**	-21.7%
Disabling injury rate	**6.65**	**5.91**	**-11.1%**
Duration rate	156	**114**	-27.0%
Days lost (LTC)	2,808	**1,807**	-35.6%
Transaction claim costs (LTC)	$664,518	**$476,787**	-28.3%

Data Source: WCB Data, Prepared by Data Development and Evaluation

Mechanical, Electrical and Insulation

The lost-time claim rate for the Mechanical, Electrical and Insulation sub-sector decreased by 2.8% in 2009, to 1.75 per 100 person-years worked. The disabling injury rate fell by 10.1% in 2009, to 4.08 per 100 person-years worked. The duration rate decreased from 39 per 100 person-years worked in 2008 to 37 per 100 person-years worked in 2009 (see Table 4.6).

Over the last five years, the lost-time claim rate for the Mechanical, Electrical and Insulation sub-sector decreased by 21.2%. For all ACSA industries, the average lost-time claim rate fell by 32.6% over this period. For all sectors of the province, the average lost-time claim rate fell by 29.7%.

Table 4.6
Mechanical, Electrical and Insulation — Alberta: 2008-2009

	2008	2009	% Change
Person-years worked	54,117	**45,515**	-15.9%
Lost-time claims	976	**798**	-18.2%
Lost-time claim rate	**1.80**	**1.75**	**-2.8%**
Modified-work claims	2,129	**1,509**	-29.1%
Lost-time claims involving modified work	648	**449**	-30.7%
Disabling injury claims	2,457	**1,858**	-24.4%
Disabling injury rate	**4.54**	**4.08**	**-10.1%**
Duration rate	39	**37**	-3.3%
Days lost (LTC)	20,852	**16,961**	-18.7%
Transaction claim costs (LTC)	$7,236,418	**$6,251,854**	-13.6%

Data Source: WCB Data, Prepared by Data Development and Evaluation

Roadbuilders

The lost-time claim rate for the Roadbuilders sub-sector decreased by 11.0% in 2009, to 1.38 per 100 person-years worked. The 2009 rate is the second lowest in the ACSA industries. The duration rate was 59 days lost per 100 person-years worked. The disabling injury rate was 3.42 per 100 person-years worked (see Table 4.7).

The Roadbuilders sub-sector had the lowest lost-time claim rate in the ACSA industries in two of the last five years (see Table 4.1) and has seen a decrease of 35.3% over this period. This is a result of the number of lost-time claims decreasing by 29.9% and the person-years worked increasing by 8.4%, meaning proportionally there were fewer injury claims. For all ACSA industries, the average lost-time claim rate fell by 32.6% over this period. For all sectors of the province, the average lost-time claim rate fell by 29.7%.

Table 4.7
Roadbuilders — Alberta: 2008-2009

	2008	2009	% Change
Person-years worked	59,105	**48,066**	-18.7%
Lost-time claims	919	**665**	-27.6%
Lost-time claim rate	**1.55**	**1.38**	**-11.0%**
Modified-work claims	2,163	**1,294**	-40.2%
Lost-time claims involving modified work	604	**314**	-48.0%
Disabling injury claims	2,478	**1,645**	-33.6%
Disabling injury rate	**4.19**	**3.42**	**-18.4%**
Duration rate	58	**59**	1.4%
Days lost (LTC)	34,203	**28,191**	-17.6%
Transaction claim costs (LTC)	$12,239,726	**$10,219,762**	-16.5%

Data Source: WCB Data, Prepared by Data Development and Evaluation

Roofers

In 2009, the Roofers sub-sector experienced a 16.4% decrease in the lost-time claim rate, to 2.78 per 100 person-years worked, and a 17.6% decrease in the disabling injury rate to 4.76 per 100 person-years worked. The decrease in the lost-time claim rate was the result of lost-time claims decreasing by 19.2% and person-years worked decreasing by 3.3%. Disabling injury claims decreased by 20.3% in 2009. The duration rate in 2009 decreased by 16.9%, to 133 days lost per 100 person-years worked (see Table 4.8).

Over the last five years, the number of lost-time claims has decreased by 18.3% and the number of person-years worked increased by 14.4%, resulting in a decrease in the lost-time claim rate of 28.6%, as proportionately there were fewer injury claims. For all ACSA industries, the average lost-time claim rate fell by 32.6% over this period. For all sectors of the province, the average lost-time claim rate fell by 29.7%.

Table 4.8
Roofers — Alberta: 2008-2009

	2008	2009	% Change
Person-years worked	7,676	7,421	-3.3%
Lost-time claims	255	206	-19.2%
Lost-time claim rate	**3.32**	**2.78**	**-16.4%**
Modified-work claims	335	238	-29.0%
Lost-time claims involving modified work	147	91	-38.1%
Disabling injury claims	443	353	-20.3%
Disabling injury rate	**5.77**	**4.76**	**-17.6%**
Duration rate	160	133	-16.9%
Days lost (LTC)	12,265	9,852	-19.7%
Transaction claim costs (LTC)	$3,859,684	$2,667,063	-30.9%

Data Source: WCB Data, Prepared by Data Development and Evaluation

Lime, Cement and Concrete Products Manufacturing

The lost-time claim rate for the Lime, Cement and Concrete Products Manufacturing industry decreased by 13.4%, to 3.22 per 100 person-years worked in 2009, while the disabling injury rate decreased by 22.3%, to 5.44 per 100 person-years worked.

The decreases in the lost-time claim rate and disabling injury rate were the result of the number of claims decreasing. In 2009, the person-years worked decreased by 17.3%, while lost-time claims decreased by 28.4%. Disabling injury claims decreased by 35.7%. The duration rate in 2009 was 108 days lost per 100 person-years worked, a decrease of 7.3% from 2008 (see Table 4.9).

Since 2005, the number of lost-time claims has decreased by 17.8% and person-years worked increased by 25.3%, resulting in a 36.6% decrease in the lost-time claim rate. For all ACSA industries, the lost-time claim rate fell by 32.6% over this period.

Table 4.9
Lime, Cement and Concrete Products Manufacturing — Alberta: 2008-2009

	2008	2009	% Change
Person-years worked	7,594	**6,281**	-17.3%
Lost-time claims	282	**202**	-28.4%
Lost-time claim rate	**3.71**	**3.22**	**-13.4%**
Modified-work claims	418	**225**	-46.2%
Lost-time claims involving modified work	168	**85**	-49.4%
Disabling injury claims	532	**342**	-35.7%
Disabling injury rate	**7.01**	**5.44**	**-22.3%**
Duration rate	117	**108**	-7.3%
Days lost (LTC)	8,886	**6,813**	-23.3%
Transaction claim costs (LTC)	$2,365,871	**$2,066,376**	-12.7%

Data Source: WCB Data, Prepared by Data Development and Evaluation

Distribution of injury claims

Table 4.10 presents figures for the proportion of employers without lost-time claims or disabling injury claims in 2009, by sub-sector. Table 4.11 displays the respective person-years worked for those employers in 2009. Table 4.12 displays figures for the number of claims submitted by employers.

Table 4.10
Proportion of Employers with no Lost-Time or Disabling Injury Claims, by ACSA Sub-Sector – Alberta: 2009

Proportion of Employers by Sub-Sector	With no Lost-Time Claims	With no Disabling Injury Claims
ACSA Industries	**95%**	**93%**
Construction Trade Services	95%	94%
Glaziers	88%	84%
Industrial Construction	96%	94%
Masonry	91%	90%
Mechanical, Electrical and Insulation	93%	90%
Roadbuilders	96%	94%
Roofers	92%	90%
Lime, Cement and Concrete Producers Manufacturing	92%	90%

Data Source: WCB Data, Prepared by Data Development and Evaluation

The Industrial Construction and Roadbuilders sub-sectors displayed higher proportions of employers with no lost-time claims and employers with no disabling injury claims than the average for the ACSA industries, indicating a more highly concentrated occurrence of injury in those sectors. In 2009, the number of employers with no lost-time claims translates to 50% and 38% of the total person-years worked in these sub-sectors respectively (see Table 4.11).

Table 4.11

Proportion of Person-years worked accounted for by Employers with no Lost-Time or Disabling Injury Claims, by ACSA Sub-Sector – Alberta: 2009

Proportion of person-years accounted for by employers	With no Lost-Time Claims	With no Disabling Injury Claims
ACSA Industries	**50%**	**38%**
Construction Trade Services	70%	64%
Glaziers	32%	23%
Industrial Construction	36%	25%
Masonry	53%	44%
Mechanical, Electrical and Insulation	50%	35%
Roadbuilders	52%	34%
Roofers	62%	48%
Lime, Cement and Concrete Producers Manufacturing	58%	48%

Data Source: WCB Data, Prepared by Data Development and Evaluation

For employers who did submit claims, the Construction Trade Services sub-sector had the highest proportion of employers submitting one lost-time claim and the lowest submitting six or more lost-time claims. The Industrial Construction sub-sector had the lowest proportion of employers submitting one lost-time claim. For disabling injury claims, the Glaziers, Industrial Construction and Roadbuilders sub-sectors each had at least 14% of employers submitting six or more disabling injury claims (see Table 4.12).

Table 4.12
Proportion of Employers with Lost-Time or Disabling Injury Claims, by ACSA Sub-Sector – Alberta: 2009

Sub-Sector	1 Lost-Time Claim	2 to 5 Lost-Time Claims	6 to 20 Lost-Time Claims	Over 20 Lost-Time Claims
Construction Trade Services	82%	17%	1%	0%
Glaziers	67%	23%	10%	0%
Industrial Construction	66%	26%	8%	0%
Masonry	70%	30%	0%	0%
Mechanical, Electrical and Insulation	68%	29%	3%	0%
Roadbuilders	67%	30%	3%	0%
Roofers	82%	15%	3%	0%
Lime, Cement and Concrete Producers Manufacturing	70%	28%	2%	0%

Sub-Sector	1 Disabling Injury Claim	2 to 5 Disabling Injury Claims	6 to 20 Disabling Injury Claims	Over 20 Disabling Injury Claims
Construction Trade Services	77%	21%	2%	0%
Glaziers	51%	33%	12%	3%
Industrial Construction	55%	30%	10%	6%
Masonry	67%	24%	9%	0%
Mechanical, Electrical and Insulation	55%	36%	9%	1%
Roadbuilders	55%	31%	12%	2%
Roofers	72%	22%	6%	0%
Lime, Cement and Concrete Producers Manufacturing	65%	29%	5%	2%

Data Source: WCB Data, Prepared by Data Development and Evaluation

DEMOGRAPHICS OF INJURED WORKERS

Injured Worker Characteristics

By occupational group, construction trades accounted for 32.1% of lost-time claims and 27.6% of disabling injury claims in the ACSA industries in 2009. These workers accounted for 25.0% of those in employment[5] in the Construction sector. Trades helpers, construction, and transportation labourers and related occupations had the largest difference between the proportion of claims and employment, accounting for 22.1% of lost-time claims, 23.0% of disabling injury claims and 10.9% of those in employment. In contrast, Contractors and supervisors in trades and transportation made up 2.9% of lost-time claims and 2.7% of disabling injury claims and 10.3% of employment (see Table 5.1).

Table 5.1
Lost-Time Claims and Disabling Injury Claims by Selected Occupation Group for the ACSA Industries — Alberta: 2009

Occupation Group	Lost-time Claims	Disabling Injury Claims	Employment
Construction Trades	32.1%	27.6%	25.0%
Trades Helpers, Construction, and Transportation Labourers and Related Occupations*	22.1%	23.0%	10.9%
Machinists, Metal Forming, Shaping and Erecting Occupations	8.5%	10.8%	4.5%
Stationary Engineers, Power Station Operators and Electrical Trades and Telecommunications Occupations	5.5%	8.4%	8.8%
Transportation Equipment Operators and Related Workers, Excl. Labourers	4.0%	3.6%	3.1%
Heavy Equipment and Crane Operators Including Drillers	4.4%	4.5%	6.6%
Other Trades N.E.C.**	2.9%	2.1%	1.8%
Mechanics	2.9%	3.3%	5.3%
Contractors and Supervisors in Trades and Transportation	2.9%	2.7%	10.3%
All Other Occupations	14.7%	13.9%	23.5%

*For the purposes of this report, Labourers in processing, manufacturing and utilities and Primary production labourers have been grouped with Trades helpers, construction, and transportation labourers and related occupations due to slight differences in coverage between the industry sector groupings in the Labour Force Survey and those industries in the ACSA.
**Not Elsewhere Classified
Data Source: WCB Data, Prepared by Data Development and Evaluation; Statistics Canada, Labour Force Survey (Microdata Files)

[5] A comparison of the proportion of claims by occupation group for the ACSA industries with the numbers in employment has been made using data from the Statistics Canada Labour Force Survey for the Construction sector. Coverage differences do exist in industry categories. Using proportions attempts to overcome obvious distortions in the numbers in employment, although the impact on proportions in employment is unclear.

In 2009, 70.4% of lost-time claims and 70.0% of disabling injury claims were from workers aged 25 to 54 years, who accounted for 69.4% of those in employment[6]. Young workers, those aged 15 to 24, accounted for 17.9% of lost-time claims and 20.4% of disabling injury claims (see Table 5.2), while accounting for approximately 16.3% of those in employment[7].

Table 5.2
Lost-Time Claims and Disabling Injury Claims by Age for the ACSA Industries — Alberta: 2008-2009

Age	2008				2009			
	Lost-Time Claims	%	Disabling Injury Claims	%	Lost-Time Claims	%	Disabling Injury Claims	%
15-19 Years	283	4.9%	751	5.4%	177	3.9%	428	4.2%
20-24 Years	975	16.9%	2,479	17.8%	637	14.0%	1,656	16.2%
25-34 Years	1,584	27.5%	4,031	28.9%	1,320	29.0%	3,066	30.1%
35-44 Years	1,236	21.5%	2,957	21.2%	960	21.1%	2,117	20.8%
45-54 Years	1,061	18.4%	2,510	18.0%	924	20.3%	1,950	19.1%
55-64 Years	509	8.8%	1,081	7.7%	404	8.9%	811	8.0%
65+ Years	108	1.9%	154	1.1%	123	2.7%	167	1.6%
Unspecified	2	N/A	2	N/A	1	N/A	1	N/A
Total	**5,758**	**100.0%**	**13,965**	**100.0%**	**4,546**	**100.0%**	**10,196**	**100.0%**

Data Source: WCB Data, Prepared by Data Development and Evaluation

In the ACSA industries, the majority of lost-time claims and disabling injury claims were from men. In 2009, 93.9% of lost-time claims and 93.4% of disabling injury claims involved men (see Table 5.3). The proportions of injuries roughly reflect the labour market make-up of the Construction industry where men comprise approximately 86.8% of those in employment.

Table 5.3
Lost-Time Claims and Disabling Injury Claims by Gender for the ACSA Industries — Alberta: 2008-2009

Gender	2008				2009			
	Lost-Time Claims	%	Disabling Injury Claims	%	Lost-Time Claims	%	Disabling Injury Claims	%
Women	408	7.1%	1,054	7.6%	278	6.1%	674	6.6%
Men	5,350	92.9%	12,807	92.4%	4,268	93.9%	9,491	93.4%
Unspecified	0	N/A	104	N/A	0	N/A	31	N/A
Total	**5,758**	**100.0%**	**13,965**	**100.0%**	**4,546**	**100.0%**	**10,196**	**100.0%**

Data Source: WCB Data, Prepared by Data Development and Evaluation

[6] Statistics Canada's Labour Force Survey for the Construction sector (2009 Historical Review).
[7] Statistics Canada's Labour Force Survey for the Construction sector (2009 Historical Review). For further information see the Occupational Injuries and Diseases in Alberta Young Workers publication.

INJURY AND DISEASE ANALYSIS

Being struck by an object was the most common cause for lost-time claims in the ACSA industries. Sprains, strains and tears continued to be the leading nature of injury with the trunk being the most commonly injured body part.

Nature of Injury or Disease

The nature of injury is used to identify the physical characteristics of the injury or disease. In 2009, 92.6% of all the lost-time claims and 95.1% of disabling injury claims were caused by traumatic injuries and disorders. The four most common traumatic injuries and disorders were: sprains, strains and tears, fractures and dislocations, surface wounds and bruises, and open wounds (see Table 6.1).

Note 6.1
Throughout this section, the classifications used are based on the Canadian Standards Association (CSA) standards for categorizing occupational injury and disease information.

Compared to the average for all sectors in the province, the ACSA industries had higher proportions[8] of lost-time and disabling injury claims than the average in most injury categories, indicating a higher probability or likelihood of this type of injury occurring.

For lost-time claims, fractures and dislocations had a proportion of 1.6 times the average for all sectors in the province, followed by open wounds, at 1.5 times the average for all sectors.

Disabling injury claims for the following categories all displayed proportions that were higher than the average for all sectors; fractures and dislocations, 1.4 times higher; open wounds, 1.4; surface wounds and bruises, 1.1; systemic diseases and disorders, 1.2; and sprains, strains and tears, 1.1 times the average for all sectors of the province.

Note 6.2
The CSA standard is designed so that Nature of Injury and Part of Body categories are directly linked when classifying injuries. This is also true for the relationship between the Source of Injury and Type of Event categories.

[8] The proportion or number of times higher or lower compares the ACSA industries' claim rate and proportion of injuries by each injury type, against the average claim rate and injury proportion for all sectors in the province. A value equal to 1 indicates an equal probability or likelihood to the average. A value higher than 1 indicates an increased likelihood of this type of injury occurring, and a value less than one indicates a lower likelihood. See Appendix A for calculation details.

Table 6.1
Nature of Injury or Disease — Alberta: 2009

Nature of Injury	Lost-Time Claims	%	Disabling Injury Claims	%
Traumatic Injuries and Disorders	**4,209**	**92.6%**	**9,692**	**95.1%**
Sprains, Strains and Tears	2,021	44.5%	4,869	47.8%
Fractures and Dislocations	677	14.9%	1,040	10.2%
Open Wounds	490	10.8%	1,286	12.6%
Surface Wounds and Bruises	445	9.8%	1,291	12.7%
Burns	61	1.3%	127	1.2%
Other Traumatic Injuries and Disorders	515	11.3%	1,079	10.6%
Systemic Diseases and Disorders	**309**	**6.8%**	**455**	**4.5%**
Infectious and Parasitic Disorders	**4**	**0.1%**	**4**	**<0.1%**
Neoplasms, Tumors and Cancer	**3**	**0.1%**	**3**	**<0.1%**
Symptoms, Signs and Ill-Defined Conditions	**8**	**0.2%**	**19**	**0.2%**
Multiple Diseases, Conditions and Disorders	**0**	**0.0%**	**0**	**0.0%**
Other Diseases, Conditions and Disorders	**9**	**0.2%**	**9**	**<0.1%**
Nature of Injury - Unknown	**4**	**0.1%**	**14**	**0.1%**
Total	**4,546**	**100.0%**	**10,196**	**100.0%**

Data Source: WCB Data, Prepared by Data Development and Evaluation

Part of Body Injured

In 2009, the trunk was the most commonly injured body part, accounting for over 35.9% of the total lost-time claims and 34.2% of disabling injury claims in the ACSA industries. For lost-time claims, this was followed by injuries to the lower extremities, 23.4%. For disabling injury claims, the upper extremities was the next most commonly injured body part, 28.7%. The most common trunk injury was to the back, including spine and spinal cord, accounting for 21.7% of the total lost-time claims and 21.1% of total disabling injury claims (see Table 6.2).

Compared to the average for all sectors in the province, the ACSA industries had higher proportions[9] of lost-time and disabling injury claims than the average for all sectors in the province in most injury categories, indicating a higher probability or likelihood of these parts of body being injured. Lost-time claims involving injuries to the eye(s) displayed the highest proportions, 1.6 times higher than the average for all sectors of the province. This was followed by injuries to the leg(s), and injuries to the finger(s) and fingernail(s), both at 1.3 times higher. Wrist(s) and hand(s) except finger(s) and the ankle(s) and foot (feet) displayed proportions that were 1.2 times higher than the average for all sectors of the province. Other trunk, other head parts and other upper extremities displayed proportions that were 1.1 times higher than the average for all sectors of the province.

For disabling injury claims, all parts of body categories, except body systems and other lower extremities, displayed proportions higher than the average. Disabling injuries to the eye(s) displayed the highest proportion, 1.9 times higher, followed by leg(s), and ankle(s) and foot (feet), at 1.6 and 1.5 times the average for all sectors of the province.

[9] The proportion or number of times higher or lower compares the ACSA industries' claim rate and proportion of injuries by each injury type, against the average claim rate and injury proportion for all sectors in the province. A value equal to 1 indicates an equal probability or likelihood to the average. A value higher than 1 indicates an increased likelihood of this type of injury occurring, and a value less than one indicates a lower likelihood. See Appendix A for calculation details.

Table 6.2
Part of Body Injured — Alberta: 2009

Part of Body Injured	Lost-Time Claims	%	Disabling Injury Claims	%
Trunk	**1,634**	**35.9%**	**3,491**	**34.2%**
Back, Including Spine, Spinal Cord	986	21.7%	2,154	21.1%
Other Trunk	648	14.3%	1,337	13.1%
Lower Extremities	**1,064**	**23.4%**	**2,290**	**22.5%**
Leg(s)	574	12.6%	1,216	11.9%
Ankle(s) and Foot (Feet) Except Toes	457	10.1%	1,017	10.0%
Other Lower Extremities	33	0.7%	57	0.6%
Upper Extremities	**1,032**	**22.7%**	**2,927**	**28.7%**
Finger(s), Fingernail(s)	370	8.1%	1,196	11.7%
Wrist(s) and Hand(s) Except Finger(s)	402	8.8%	1,099	10.8%
Other Upper Extremities	260	5.7%	632	6.2%
Head	**411**	**9.0%**	**760**	**7.5%**
Other Head Parts	250	5.5%	398	3.9%
Eye(s)	161	3.5%	362	3.6%
Multiple Body Parts	**269**	**5.9%**	**450**	**4.4%**
Neck, Including Throat	**102**	**2.2%**	**229**	**2.2%**
Body Systems	**30**	**0.7%**	**43**	**0.4%**
Other Body Parts	**1**	**0.0%**	**1**	**<0.1%**
Part of Body - Unknown	**3**	**0.1%**	**5**	**<0.1%**
Total	**4,546**	**100.0%**	**10,196**	**100.0%**

Data Source: WCB Data, Prepared by Data Development and Evaluation

Source of Injury or Disease

The source of injury or disease describes the object or substance that the worker came into contact with resulting in an injury or disease. In 2009, the two primary sources of lost-time claims in the ACSA industries were structures and surfaces, and persons, plants, animals and minerals accounting for 24.7% and 18.5% of total claims respectively. The most common source of disabling injury claims was parts and materials at 21.2% of total disabling injury claims (see Table 6.3).

Compared to the average for all sectors in the province, the ACSA industries had higher proportions[10] of lost-time and disabling injury claims (than the average) in most injury categories, indicating a higher probability or likelihood of this source of injury. Minerals - metallic or nonmetallic (except fuel) had proportions 3.1 and 3.3 times higher than the average for all sectors of the province for lost-time claims and disabling injury claims. Hand tools – powered had proportions both 3.0 times higher than the average for all sectors for lost-time claims and disabling injury claims. Parts and materials had proportions 1.9 and 2.1 times higher than the average for all sectors of the province.

[10] The proportion or number of times higher or lower compares the ACSA industries' claim rate and proportion of injuries by each injury type, against the average claim rate and injury proportion for all sectors in the province. A value equal to 1 indicates an equal probability or likelihood to the average. A value higher than 1 indicates an increased likelihood of this type of injury occurring, and a value less than one indicates a lower likelihood. See Appendix A for calculation details.

Table 6.3
Source of Injury or Disease — Alberta: 2009

Source of Injury	Lost-Time Claims	%	Disabling Injury Claims	%
Structures and Surfaces	**1,124**	**24.7%**	**2,018**	**19.8%**
Persons, Plants, Animals and Minerals	**840**	**18.5%**	**2,147**	**21.1%**
Person - Injured or Ill Worker	750	16.5%	1,966	19.3%
Minerals - Metallic or Nonmetallic (except fuel)	51	1.1%	105	1.0%
Person - Other Than Injured or Ill Worker*	15	0.3%	22	0.2%
Other Persons, Plants, Animals & Minerals	24	0.5%	54	0.5%
Parts and Materials	**817**	**18.0%**	**2,162**	**21.2%**
Tools, Instruments and Equipment	**481**	**10.6%**	**1,232**	**12.1%**
Hand Tools - Nonpowered	177	3.9%	575	5.6%
Hand Tools - Powered	99	2.2%	231	2.3%
Other Tools and Equipments	205	4.5%	426	4.2%
Vehicles	**255**	**5.6%**	**502**	**4.9%**
Machinery	**299**	**6.6%**	**568**	**5.6%**
Containers**	**232**	**5.1%**	**514**	**5.0%**
Chemicals and Chemical Products	**46**	**1.0%**	**92**	**0.9%**
Furniture and Fixtures	**74**	**1.6%**	**161**	**1.6%**
Other Sources	**324**	**7.1%**	**653**	**6.4%**
Source of Injury - Unknown	**54**	**1.2%**	**147**	**1.4%**
Total	**4,546**	**100.0%**	**10,196**	**100.0%**

* Person – other than injured or ill worker: classifies workplace injuries or illnesses inflicted by family members as well as non-family relations, including co-workers, former co-workers, and patients.
** Containers: classifies receptacles commonly used to hold, store or carry materials (examples: dishes, cups and glasses, luggage, etc.).
Data Source: WCB Data, Prepared by Data Development and Evaluation

Type of Event or Exposure

The type of event or exposure describes the incident or event that occurred at the time of the exposure that directly resulted in the injury or disease. The two most common types of event or exposure comprised 65.8% of total lost-time claims and 74.0% of disabling injury claims in the ACSA industries in 2009. They are bodily reaction and exertion and contact with objects or equipment (see Table 6.4).

Compared to the average for all sectors in the province, the ACSA industries had above-average proportions[11] of lost-time and disabling injury claims in most injury categories. Lost-time claims and disabling injury claims caused by falls to the lower level, displayed proportions that were 2.2 times higher than the average for all sectors of the province respectively. Being rubbed and abraded displayed proportions that were 1.8 and 2.1 times higher for lost-time claims and disabling injury claims. Fires and explosions displayed proportions that were 2.0 and 1.8 times higher.

[11] The proportion or number of times higher or lower compares the ACSA industries' claim rate and proportion of injuries by each injury type, against the average claim rate and injury proportion for all sectors in the province. A value equal to 1 indicates an equal probability or likelihood to the average. A value higher than 1 indicates an increased likelihood of this type of injury occurring, and a value less than one indicates a lower likelihood. See Appendix A for calculation details.

Table 6.4
Type of Event or Exposure — Alberta: 2009

Type of Event or Exposure	Lost-Time Claims	%	Disabling Injury Claims	%
Bodily Reaction or Exertion	**1,737**	**38.2%**	**4,156**	**40.8%**
Overexertion	898	19.8%	1,993	19.5%
Bodily Reaction*	573	12.6%	1,528	15.0%
Repetitive Motion	123	2.7%	288	2.8%
Other Bodily Reaction/Exertion	143	3.1%	347	3.4%
Contact with Objects or Equipment	**1,255**	**27.6%**	**3,389**	**33.2%**
Struck by Object	658	14.5%	1,667	16.3%
Struck against Object	207	4.6%	652	6.4%
Caught in Object	208	4.6%	588	5.8%
Rubbed or Abraded	88	1.9%	235	2.3%
Other Contact with Object/Equipment	94	2.1%	247	2.4%
Falls	**1,063**	**23.4%**	**1,828**	**17.9%**
Fall to Lower Level	523	11.5%	740	7.3%
Fall on Same Level	478	10.5%	976	9.6%
Other Falls	62	1.4%	112	1.1%
Transportation Accidents	**200**	**4.4%**	**337**	**3.3%**
Exposure to Harmful Substances	**236**	**5.2%**	**380**	**3.7%**
Assaults and Violent Acts	**13**	**0.3%**	**21**	**0.2%**
Assaults and Violent Acts by Person(s)	12	0.3%	16	0.2%
Other Assaults and Violent Acts	1	0.0%	5	0.0%
Fires and Explosions	**16**	**0.4%**	**21**	**0.2%**
Other Events or Exposures	**1**	**0.0%**	**1**	**0.0%**
Type of Event - Unknown	**25**	**0.5%**	**63**	**0.6%**
Total	**4,546**	**100.0%**	**10,196**	**100.0%**

* Bodily reaction: injuries or illnesses resulting from a single incident of free bodily motion which imposed stress or strain on some part of the body.

Data Source: WCB Data, Prepared by Data Development and Evaluation

Duration of Disability

Duration of disability[12] is intended to reflect the severity of the effects of occupational injury and disease as reflected by the number of days off work. The efforts of employers to introduce modified work programs to integrate injured workers back into the workforce can have a positive impact on workdays lost.

About 43% of lost-time claims involved durations of disability between one and ten days' duration. Lost-time claims with one to five days' duration represented 30.7%, and six to ten days' duration, 12.1% in 2009. Lost-time claims involving duration of 51 days or more comprised 22.0% (see Table 6.5). For all sectors in the province, 13.8% of claimants were unable to work for 51 days or more. In addition, the ACSA averaged 33 days lost per claim and had a median days lost of 11, while the coinciding provincial figures were 24 and seven.

Table 6.5
Duration of Disability — Alberta: 2009

Duration of Disability	% of ACSA Industries' Lost-Time Claims	% of Lost-Time Claims in the Province
1-5 Days	30.7%	39.9%
6-10 Days	12.1%	13.4%
11-15 Days	6.6%	7.6%
16-20 Days	5.3%	5.0%
21-30 Days	7.7%	6.7%
31-40 Days	5.3%	4.7%
41-50 Days	4.2%	3.4%
51 Days or More	22.0%	13.8%
Unspecified	5.9%	5.6%

Data Source: WCB Data, Prepared by Data Development and Evaluation

[12] The duration of disability refers to the length of time, in days, for which the worker receives wage compensation from the WCB.

OCCUPATIONAL FATALITIES

In 2009, the WCB accepted 36 fatalities in the ACSA industries, a decrease of 33.3% from 2008.

A WCB accepted occupational fatality is defined as the death of a worker resulting from a work-related incident or exposure which has been accepted by the WCB for compensation. Some of the fatalities accepted in a particular year occurred in prior years. Unless otherwise specified, occupational fatalities in this report refer to occupational fatalities accepted by the WCB. The WCB classifies occupational fatalities into three general types:

Motor Vehicle Incidents

Motor vehicle incidents typically involve non-industrial vehicles operating on public roads in which the fatally injured worker was either the driver or a passenger. This type of occupational fatality also includes cases involving aircraft crashes, train crashes, helicopter crashes and water vehicle crashes. In 2009, four ACSA fatalities accepted by the WCB were motor vehicle incidents (see Table 7.1).

Workplace Incidents

Workplace incidents consisted of cases in which the worker died at a worksite or as a result of injuries sustained at a worksite. This is the type of fatality that E&I typically investigates. In 2009, 13 ACSA fatalities accepted by the WCB were workplace incidents (see Table 7.1).

Latent Workplace and Motor Vehicle Fatalities

Latent fatalities consist of workers who were involved in a workplace incident or exposure, or a motor vehicle incident that did not become a fatality until a much later date, often years later. These incidents were classified as occupational diseases. From 2002, these incidents are separated out and included with either motor vehicle or workplace incident categories in accordance to their original injury.

Usually, other contributing factors cause a latent fatality, although these contributing factors are the result of the initial injury or exposure. A motor vehicle incident where a worker received leg injuries requiring surgery is a good example of this. Complications during the surgery result in a blood clot causing a fatal stroke. The injury is classified latent because the original injury caused the requirement for surgery. In 2009, there were three latent workplace incidents and one latent motor vehicle incident in the ACSA industries.

Occupational Disease

Occupational disease fatalities consist mostly of recognized occupational disease, that is, disease known to be primarily or exclusively work-related such as asbestosis and coal workers' pneumoconiosis. This category also includes heart attacks suffered on the job. Occupational diseases are frequently diagnosed several years after the initial or crucial exposure to the toxic substance, and in such cases, it is difficult to determine when the fatal exposure occurred. *The occupational disease category, therefore, should not be interpreted to reflect present worksite hazardous conditions or exposures.*

Note 7.1
The International Labour Organization (ILO) estimates that construction workers are three to four times more likely than other workers to die from accidents at work in a number of industrialized countries. (International Labour Organization, *World Day for Safety and Health at Work 2009 –Facts on safety and health at work issues*, April 2009).

Each year the WCB accepts some occupational fatality claims for compensation. Occupational fatality claims that were accepted in a particular year may include fatalities from prior years. In 2009, 19 fatalities accepted by WCB in ACSA industries were occupational disease incidents (see Table 7.1).

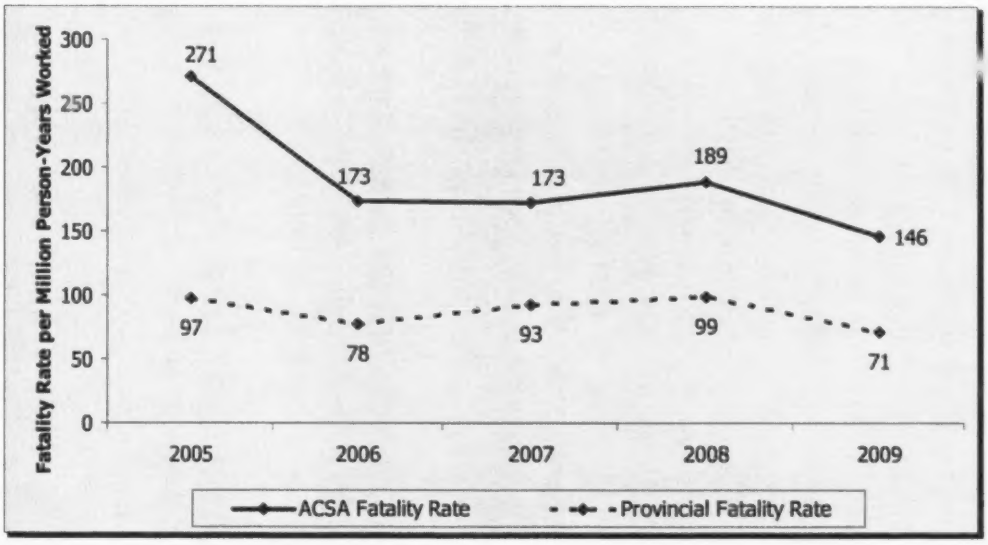
Table 7.1
Types of Occupational Fatalities Accepted by the WCB – Alberta: 2005-2009

Year	Motor Vehicle Incident		Workplace Incident		Occupational Disease		Total
	Number of Fatalities	%	Number of Fatalities	%	Number of Fatalities	%	Number of Fatalities
2005	17	29.8%	17	29.8%	23	40.4%	57
2006	5	12.5%	16	40.0%	19	47.5%	40
2007	5	11.1%	18	40.0%	23	48.9%	46
2008	12	22.2%	19	35.2%	23	42.6%	54
2009	**4**	**11.1%**	**13**	**36.1%**	**19**	**52.8%**	**36**
Total	43	18.5%	83	35.6%	107	45.9%	233

Data Source: WCB Data, Prepared by Data Development and Evaluation

The fatality rate is calculated by dividing the number of accepted fatalities in the year by the number of person-years worked in that year. The result is expressed as "per million person-years worked." The 2009 fatality rate for the ACSA industries was 146 per million person-years worked (see Chart 7.1). The provincial fatality rate in 2009 was 71 per million person-years worked.

Chart 7.1
Fatality Rate[13] in ACSA Industries: 2005-2009



Data Source: WCB Data, Prepared by Data Development and Evaluation

Between 2005 and 2009, the WCB accepted 233 fatalities in the ACSA industries. The Industrial Construction sub-sector had the most with 78 accepted fatalities, and accounted for 33.5% of all fatalities in the ACSA industries (see Table 7.2).

Table 7.2
ACSA Occupational Fatalities Accepted by the WCB by Sub-Sector – Alberta: 2005-2009

Sub-Sector	2005	2006	2007	2008	2008	Number of Fatalities	%
Construction Trade Services	5	7	10	8	**12**	42	18.0%
Industrial Construction	19	16	14	19	**10**	78	33.5%
Mechanical, Electrical and Insulation	16	6	10	12	**6**	50	21.5%
Roadbuilders	14	8	10	14	**5**	51	21.9%
Roofers	3	2	0	1	**1**	7	3.0%
Masonry	0	0	0	0	**1**	1	0.4%
Glaziers	0	1	0	0	**0**	1	0.4%
Lime, Cement and Concrete Products Manufacturing	0	0	2	0	**1**	3	1.3%
ACSA Industries	**57**	**40**	**46**	**54**	**36**	**233**	**100.0%**

Data Source: WCB Data, Prepared by Data Development and Evaluation

[13] Estimates are based upon information provided by the WCB. Fatalities occurring under the Government of Canada's jurisdiction are excluded from the calculation of the fatality rates.

CERTIFICATE OF RECOGNITION

A Certificate of Recognition (COR) is given to employers who develop health and safety programs that meet established standards. Certificates are jointly issued by Certifying Partners and E&I[14].

In 2008, 6.9% of ACSA industries' employers were COR holders. These employers accounted for 58.5% of all person-years worked in the ACSA industries. The Roadbuilders sub-sector had the highest proportion with 16.2% of employers in this sub-sector holding a valid COR in 2008, covering 80.0% of person-years worked in this sub-sector (see Table 8.1).

Table 8.1
Employers With Valid COR — Alberta: 2009

Sub-Sector	Number of Certified Employers	Total Number of Employers	% of Total Employers Certified	% of Total Person-Years Certified
ACSA	**3,423**	**49,836**	**6.9%**	**58.5%**
Construction Trade Services	458	18,197	2.5%	26.6%
Glaziers	47	823	5.7%	39.9%
Industrial Construction	692	11,377	6.1%	70.8%
Lime, Cement and Concrete Producers Manufacturing	82	1,568	5.2%	38.6%
Masonry	12	467	2.6%	25.4%
Mechanical, Electrical and Insulation	571	6,571	8.7%	60.4%
Roadbuilders	1,463	9,036	16.2%	80.0%
Roofers	98	1,797	5.5%	42.1%

Data Source: WCB Data, Prepared by Data Development and Evaluation

In the ACSA industries, the lost-time claim rate for COR holders was 1.32 per 100 person-years worked in 2009, while the rate for non-COR holders was 2.57. For disabling injury rates, COR holders had a rate of 4.40 per 100 person-years worked, while the rate for non-COR holders was 3.75 (see Table 8.2).

Comparing COR holders against all non-COR holders provides useful information about each group, although it does not compare like-with-like. A COR is given to employers who develop health and safety programs that meet established standards, with this group seeing

[14] For more information on the COR program visit http://www.employment.alberta.ca/SFW/334.html

continued improvement in their lost-time claim rates. Some non-COR holders have good programs in place above this standard, whereas others do not. This makes evaluating improving health and safety trends less clear for this group.

The two groups also differ significantly in employer structure and size. COR holders account for 6.9% of employers in the ACSA industries (see Table 8.1) but 58.5% of the person-years worked. Analysis by employer size for all sectors of the province[15] show smaller employers tend to have better health and safety performance than medium-sized and large employers. For the ACSA industries a different pattern is displayed with smaller employers displaying the highest lost-time claim rates (see Table 3.2). The pattern of claim rates by employer size differs depending on the measure. Large employers have one of the lowest lost-time claim rates and highest disabling injury rates. This is indicative of having health and safety systems in place and more proficient claims management. It also reflects the greater capacity of large employers to offer modified duties to an injured worker.

Table 8.2
Lost-Time Claim and Disabling Injury Rates for ACSA COR Holders — Alberta: 2008-2009

Employer	Year	Number of Accounts	Person-Years	Lost-Time Claims	Disabling Injury Claims	Lost-Time Claim Rate	Disabling Injury Rate	Change in Lost-Time Claim Rate	Change in Disabling Injury Rate
COR	2008	3,406	167,124	2,505	8,937	1.50	5.35	-12.0%	-17.8%
	2009	3,423	144,490	1,912	6,359	1.32	4.40		
Non-COR	2008	47,331	118,232	3,253	5,028	2.75	4.25	-6.5%	-11.8%
	2009	46,413	102,344	2,634	3,837	2.57	3.75		

Data Source: WCB Data, Prepared by Data Development and Evaluation

[15] See the Occupational Injury and Diseases in Alberta 2009 Summary publication http://www.employment.alberta.ca/SFW/129.html

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APPENDIX A: TERMS, DEFINITIONS AND FORMULAS

Lost-Time Claim

A lost-time claim (LTC) is a claim for an occupational injury or disease that causes the worker to have time away from work beyond the day of injury. Included are claims receiving reimbursement of full or partial lost wages due to occupational illness or injury, or payment for permanent loss of function.

Modified Work Claim

A modified work claim is a claim for an occupational injury or disease where a worker had their normal work duties altered to enable them to remain working without losing time from work. Also included are claims where injured workers are helped back into the workplace with modified duties after time lost due to injury or disease.

Disabling Injury Claim

Disabling injury (DI) claims combine both the lost-time and modified work concepts to produce an overall figure where an occupational injury or disease disables the worker causing either time-lost from work or for their normal work duties to be modified.

Person-Years Worked

Person-years worked are estimates calculated from wage and payroll data provided by account holders to the WCB. Alberta Employment and Immigration uses data to estimate an average industry wage, and uses the average industry wage and employer payroll data to estimate person-years worked for each employer and each industry. One person-year is equivalent to one full-time worker working for one year, and can be assumed to equal 2,000 hours worked.

Lost-Time Claim Rate

The lost-time claim rate is calculated by dividing the number of lost-time claims by the person-years worked estimate, and multiplying the result by 100. The lost-time claim rate represents the probability or risk of an injury or disease to a worker during a period of one-year work, which will result in time lost from work. Comparisons of lost-time claim rates between industries, or between years, can be used to indicate increases, decreases, or differences in this risk.

$$\text{LTC Rate} = \frac{\text{Number of LTC's}}{\text{Person-years worked}} \times 100$$

Disabling Injury Rate

The disabling injury rate is calculated by dividing the number of disabling injury claims by the person-year estimates, and multiplying the result by 100. The disabling injury rate represents the probability or risk of a disabling injury or disease to a worker during a period of one year of work. The disabling injury rate is similar to the LTC rate although it covers a broader range of injuries, including those that are less severe in nature (do not require time away from work). The rate represents the number of claims per 100 person-years worked and includes claims made for both lost-time and modified work.

$$\text{Disabling Injury Rate} = \frac{\text{Number of DI's}}{\text{Person-years worked}} \times 100$$

Duration (Days lost)

The duration of disability is the number of days following the injury or disease for which the worker was disabled and unable to perform normal work duties. This information is obtained for this report from data on compensation days paid on each claim from the WCB. Alberta Employment and Immigration obtains these data on March 31 of the year following the claim year, and does not update the information, even though many injured workers continue to be disabled beyond this date. As a result, the duration information reported here underestimates the true impact of lost-time injury and disease.

Duration Rate

The duration rate is calculated by dividing the number of workdays lost (disability days) by the person-year estimate, and multiplying by 100. The result is expressed as days lost per 100 person-years worked, and indicates, in part, the economic impact of occupational injury and disease. Duration rates are not recommended as reliable indicators of full economic cost. In addition, readers are warned that duration rates are highly unstable when based on only a few lost-time claims; it is recommended that the duration rate not be calculated based upon fewer than 30 lost-time claims.

$$\text{Duration Rate} = \frac{\text{Disability Days}}{\text{Person-years worked}} \times 100$$

Industry Coverage

About 80% of employed persons in Alberta are covered by WCB. This report focuses on all industry activity in Alberta covered by the WCB and by the provincial legislation for occupational health and safety. Most industry sectors are included but notable exceptions consist of the Government of Canada, and parts of the agriculture and finance sectors. Several professional groups (i.e. the teaching and medical professions) are also excluded as are some industries where WCB coverage is not compulsory.

WCB Accepted Fatality

An occupational fatality is the death of a worker which resulted from a work-related incident or exposure and which has been accepted by the WCB for compensation. A fatality is counted in the year it is accepted.

Fatality Rate

The fatality rate is calculated by dividing the number of accepted fatalities by the person-years worked estimate and multiplying the result by one million. The result is expressed as fatalities per million person-years worked. Fatalities that are found under the jurisdiction of the Government of Canada are excluded before the calculation of the fatality rate.

$$\text{Fatality Rate} = \frac{\text{Number of Fatalities}}{\text{Person-years worked}} \times 1{,}000{,}000$$

Number of Times Higher/Lower than the Provincial Average

The number of times higher/lower than the provincial average is used to compare the performance of the industries with the province regarding specific injury or disease. A number less than one indicates that the injury of the industries is lower than the provincial average; if equal to one it indicates the injury of the industries is the same as the provincial average and a number greater than one indicates that the injury of the industries is higher than the provincial average.

$$\frac{\text{Per cent of Total Claims for the Industries} \times \text{Industries' LTC Rate}}{\text{Per cent of Total Claims for the Province} \times \text{Provincial LTC Rate}}$$

Where:

$$\text{Per cent of Total Claims for the Industries} = \frac{\text{Number of LTCs for the Industries (e.g. back injury)}}{\text{Total LTCs for the Industries}} \times 100$$

$$\text{Per cent of Total Claims for the Province} = \frac{\text{Number of LTCs for the Province (e.g. back injury)}}{\text{Total LTCs for the Province}} \times 100$$

Labour Force Survey

The Labour Force Survey (LFS) is a household survey carried out monthly by Statistics Canada. The objectives of the LFS have been to divide the working-age population into three mutually exclusive classifications - employed, unemployed, and not in the labour force - and to provide descriptive and explanatory data on each of these categories. Data from the survey provide information on major labour market trends

such as shifts in employment across industrial sectors, hours worked, labour force participation and unemployment rates.

For the most part, annual LFS data has been analyzed alongside injury and disease information to aid the understanding of injury risk or frequency by worker type. The LFS uses a different industry classification from WCB, although there are similarities in structure. Where possible, the two data sources are used comparably and proportions (of totals) have been used to evaluate information generated from both sources. Using proportions attempts to overcome obvious distortions in the numbers in employment from both sources, although the impact on the proportions from industry coverage differences is unclear. In certain instances, monthly LFS micro-data files have been combined and used to produce proportion estimates for the whole year for particular sub-groups of the population.

For further information on the LFS, please see
http://www.employment.alberta.ca/BI/2599.html

APPENDIX B: ALBERTA CONSTRUCTION SAFETY ASSOCIATION INDUSTRIES WCB CODES

The ACSA is a non-profit organization funded and directed by industry. This publication focuses on industry activity relevant to ACSA members. Approximately two-thirds of the industries included in the Construction and Construction Trade Services sector are also included in the ACSA industries. While similarities exist in certain ACSA sub-sector and Construction and Construction Trade Services sub-sector [16] names, differences in coverage exist. For the purposes of the *Occupational Injuries and Diseases in Alberta – Alberta Construction Safety Association Industries* publication these sub-sectors are defined below. Analyses presented in the *Occupational Injuries and Diseases in Alberta – Summary* publication follow the WCB main industry classification.

1. Construction Trade Services

02100 – Landscaping Including Maintenance
40401 – Construction, Residential
40405 – Residential General Contractor
42111 – Painting and Decorating
42113 – Tile and Terrazzo, Sales/Installation
42115 – Paving Stone, Sales/Installation
42125 – Floor Covering, Sales/Installation
42133 – Cabinets and Counters, Assembly/Installation
42135 – Drywall, Plaster, Lath and Stucco, Sales/Installation
42136 – Underground Sprinklers, Sales/Installation/Service
42141 – Acoustic Materials, Sales/Installation
42143 – Wood Framing
42147 – Finishing Carpentry
42155 – Moving of Buildings

2. Glaziers

30302 – Overhead Doors, Installation/Repair
42121 – Door and Window, Manufacturing/Installation

3. Industrial Construction

40400 – Construction and Industrial General Contracting
42105 – Prefabricated Steel Structures Erect/Removal
42106 – Structural Steel Erect
42109 – Stationary Machinery or Equipment, Installation/Service
42120 – Sandblasting
42127 – Fence Sales, Rental, Installation
42129 – Industrial Plant Maintenance

[16] The Construction and Construction Trade Services sector is a main industry sector as classified by WCB. For more information see the industry descriptions https://ds.wcb.ab.ca/WCB.RateManual.WebServer/SectorIndex.aspx

42156 – Storage Tanks Erect/Dismantle
42159 – Piling, Caisson Operations and Foundation Boring
42161 – Precast Concrete Erect/Installation
51504 – Cathodic Protection Services
62302 – Machinery or Equipment–NEC, Sales/Service/Repair
86911 – Manpower Services– Industrial Labour
89401 – Welding
89605 – Service Station Equipment, Sales/Installation/Repair
89928 – Scaffolding and Tower Cranes, Rental/Erect

4. Masonry

42102 – Brick and Masonry Construction

5. Mechanical, Electrical and Insulation

31508 – Servicing (Only) of Overhead Cranes
42110 – Elevators and Escalators, Installation/Service
42117 – Heating, Ventilation, Air Systems, Installation/Service
42122 – Plumbing, Steam and Gas Fitting
42124 – Electrical Instrumentation Contracting
42144 – Fire Sprinklers Systems, Sales/Service/Installation
42184 – Mechanical Insulation, Installation/Service
89600 – Refrigeration Equipment, Sales/Service

6. Roadbuilders

02200 – Right-of-Way Maintenance, Industrial
34800 – Transit Mix Operations
40602 – Paving and Surfacing
40604 – Mobile Equipment Operations, Road Construction
40901 – Power Lines, Construction/Removal
40905 – Pipeline Construction
42103 – Boring, Horizontal or Angular

7. Roofers

42118 – Roofing
42139 – Waterproofing, Industrial Coating Applications
42151 – Siding, Soffit, Eavestrough, Fabrication/Installation

8. Lime, Cement and Concrete Products Manufacturing

42104 – Concrete Construction

CONTACT INFORMATION

For further information about the data presented in this report contact:

Government of Alberta
Employment and Immigration
Data Development and Evaluation
2nd Floor, 10808 – 99 Avenue
Edmonton, Alberta
T5K 0G5

Telephone: 780-427-8531, toll free by calling 310-0000
Fax: 780-422-5070

Employment and Immigration website:

http://employment.alberta.ca

Work Safe Alberta website:

www.worksafe.alberta.ca

Workplace Health and Safety Contact Centre:

Telephone: 780-415-8690, toll free by calling 1-866-415-8690

http://www.employment.alberta.ca/SFW/2874.html

Certificate of Recognition (COR) Program:

http://www.employment.alberta.ca/SFW/334.html